



Conducting Value

COMMUNICATION CABLES FOR MARINE AND OFFSHORE APPLICATIONS





MARINE AND OFFSHORE COMMUNICATION CABLES

Caviced provides a wide range of Marine and Offshore cables able to meet the highest requirements of performance and safety.

Beyond the cables presented in this catalogue, Caviced offers customized solutions, including hybrid cables.



ISO 9001:2015
Certificate No. CS1-249



Be safe and choose Caviced cables

OPTICEL *Fiber Optic Cables*

FIRECEL *Fire Resistant Cables*

INCOCEL *Instrumentation and Control Cables*



CORPORATE VIDEO


MADE IN ITALY



Assessed to ISO 9001:2015
Cert/LPCB ref. 217



ISO 9001:2015
n. 9125.CAVL



ISO 14001:2015
n. 9191.CVCL

QFCI/QFCU

Multiloose Fire resistant

MLO-000-**-M1-A1-FR-QFCI/QFCU



Approved by:



APPLICATIONS

- Safety Systems, Critical Connections and Fire Fighting Systems
- Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems

OPERATING TEMPERATURE

-40 °C / + 70 °C (operating)
 -40 °C / + 70 °C (storage)
 -10 °C / + 70 °C (installation)

MINIMUM BENDING RADIUS

20 times overall diameter (dynamic)
 10 times overall diameter (static)

CABLE CONSTRUCTION

Fibres

Singlemode and multimode fibres, with loose technology coating.

Structure

The jelly filled tubes containing the fibres are individually wrapped with a mica tape and are cabled around a central steel or FRP (fibreglass reinforced plastic) element. A flame resistant tape improves fire resistance.

Inner sheath

LSZH compound.

Armouring

Galvanized steel wire braid

Outer sheath

QFCI type: LSZH - SHF1 compound

QFCU type: LSZH SHF2, SHF2 MUD resistant compound⁽¹⁾

APPLICABLE STANDARDS

Materials

IEC 60092-360

Optical fibre characteristics

IEC 60794-1-1, IEC 60794-1-2

Fire resistant

IEC 60331-25

Fire retardant

IEC 60332-3-24

Flame retardant

IEC 60332-1-2

Acid gas emission

IEC 60754-1, EC 60754-2

Smoke density

IEC 61034-2 EN 50268-2

Cables for offshore installation

NEK 606

Type	Fibre (n° max)	Tube Diameter (mm)	Diameter (mm)	Weight (kg/km)	Tension load (N)	Crush (N/100mm)
MLO-000-**(n)-M1-A1-FR-QFCI/QFCU	4	2.5	13.5	230	1500	3000
MLO-000-**(n)-M1-A1-FR-QFCI/QFCU	8	2.5	13.5	230	1500	3000
MLO-000-**(n)-M1-A1-FR-QFCI/QFCU	12	2.5	13.5	230	1500	3000
MLO-000-**(n)-M1-A1-FR-QFCI/QFCU	24	2.5	13.5	230	1500	3000
MLO-000-**(n)-M1-A1-FR-QFCI/QFCU	48	2.5	13.5	230	1500	3000

approximate values

⁽¹⁾ Tested for: Oil based drilling fluid, Calcio Bromide Brine, IRM 902 and IRM 903 oils

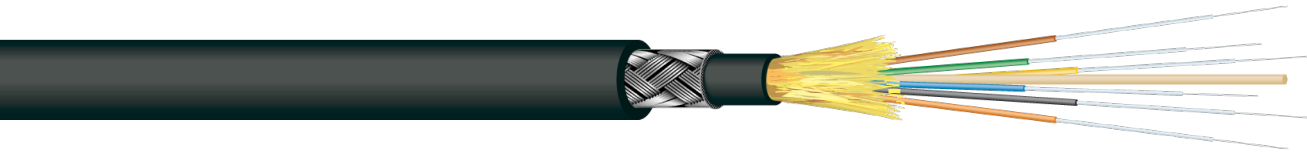
MADE IN ITALY

Cavicel, Conducting Value

AICI/AICU

MultiTight

MTI-000-**-M1-A1-AICI/AICU



Approved by:



APPLICATIONS

- Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems

OPERATING TEMPERATURE

-40 °C / + 70 °C (operating)
-40 °C / + 70 °C (storage)
-10 °C / + 70 °C (installation)

MINIMUM BENDING RADIUS

20 times overall diameter (dynamic)
10 times overall diameter (static)

CABLE CONSTRUCTION

Fibres

Singlemode and multimode fibres, with tight technology coating.

Structure

Tight fibers (each single fiber reinforced by PA at 850 micron), assembled around a central FRP with peripheral swellable aramide yarns.

Inner sheath

LSZH compound.

Armouring

Galvanized steel wire braid

Outer sheath

AICI type: LSZH SHF1 compound

AICU type: LSZH SHF2 - SHF2 MUD resistant compound⁽¹⁾

APPLICABLE STANDARDS

Materials

IEC 60092-360

Optical fibre characteristics

IEC 60794-1-1, IEC 60794-1-2

Fireretardant

IEC 60332-3-24

Flame retardant

IEC 60332-1-2

Acid gas emission

IEC 60754-1

IEC 60754-2

Smoke density

IEC 61034-2

Cables for offshore installation

NEK 606

Type	Fibre (n° max)	Tube Diameter (mm)	Diameter (mm)	Weight (kg/km)	Tension load (N)	Crush (N/100mm)
MTI-000-**-M1-A1-AICI/AICU	2	0.850	7.8	88	500	2000
MTI-000-**-M1-A1-AICI/AICU	4	0.850	8.0	98	600	2000
MTI-000-**-M1-A1-AICI/AICU	8	0.850	9.0	110	800	2000
MTI-000-**-M1-A1-AICI/AICU	12	0.850	10.0	130	1000	2000

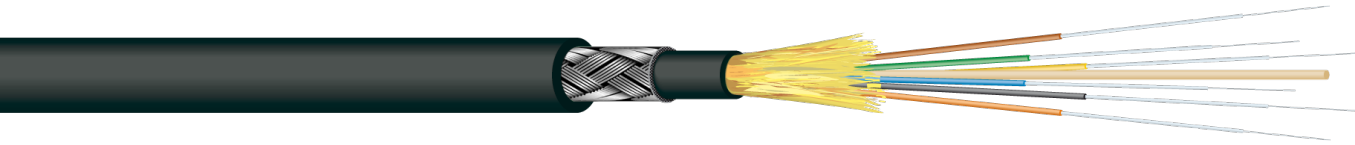
approximate values

(1) Test for: Oil based drilling fluid, Calcio Bromide Brine, IRM 902 and IRM 903 oils

AIOI/AIOU

MultiTight

MTI-000-**-M1-A1-AIOI/AIOU



Approved by:



APPLICATIONS

- Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems

OPERATING TEMPERATURE

- 40 °C / +70 °C (operating)
- 40 °C / +70 °C (storage)
- 10 °C / +70 °C (installation)

MINIMUM BENDING RADIUS

- 20 times overall diameter (dynamic)
- 10 times overall diameter (static)

CABLE CONSTRUCTION

Fibres

Singlemode and multimode fibres, with tight technology coating.

Structure

Tight fibers (each single fiber reinforced by PA at 850 micron), assembled around a central FRP with peripheral swellable aramide yarns.

Inner sheath

LSZH compound.

Armouring

Tinned copper wire braid

Outer sheath

AIOI type: LSZH SHF1 compound

AIOU type:LSZH SHF2, SHF2 MUD resistant compound⁽¹⁾

APPLICABLE STANDARDS

Materials

IEC 60092-360

Optical fibre characteristics

IEC 60794-1-1, IEC 60794-1-2

Fireretardant

IEC 60332-3-24

Flame retardant

IEC 60332-1-2

Acid gas emission

IEC 60754-1, IEC 60754-2

Smoke density

IEC 61034-2

Cables for offshore installation

NEK 606

Type	Fibre (n° max)	Tube Diameter (mm)	Diameter (mm)	Weight (kg/km)	Tension load (N)	Crush (N/100mm)
MTI-000-**-M1-A1-AICI/AICU	2	0.850	7.8	88	500	2000
MTI-000-**-M1-A1-AICI/AICU	4	0.850	8.0	98	600	2000
MTI-000-**-M1-A1-AICI/AICU	8	0.850	9.0	110	800	2000
MTI-000-**-M1-A1-AICI/AICU	12	0.850	10.2	145	1000	2000

approximate values

⁽¹⁾ Tested for: Oil based drilling fluid , Calcio Bromide Brine, IRM 902 and IRM 903 oils

SLO-FR

Single tube fire resistant cable

SLO-000-**-M1-A1-WB-FR



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OPERATING TEMPERATURE

-40 °C / + 70 °C (operating)
 -40 °C / + 70 °C (storage)
 -10 °C / + 70 °C (installation)

MINIMUM BENDING RADIUS

20 times overall diameter (dynamic)
 10 times overall diameter (static)

CABLE CONSTRUCTION

Fibres

Singlemode and multimode fibres, with loose technology coating.

Structure

The jelly filled tube containing up to 24 fibres wrapped with a mica tape. Overall glass yarns and glass tape to improve the fire and WB performance

Inner sheath

LSZH compound.

Armouring

Galvanized steel wire braid

Outer sheath

Type: LSZH - SHF1 compound

APPLICABLE STANDARDS

Materials

IEC 60092-360

Optical fibre characteristics

IEC 60794-1-1, IEC 60794-1-2

Fire resistant

IEC 60331-25

Fire retardant

IEC 60332-3-22

Flame retardant

IEC 60332-1-2

Acid gas emission

IEC 60754-1, EC 60754-2

Smoke density

IEC 61034-2 EN 50268-2

Cables for offshore installation

NEK 606

Type	Fibre (n° max)	Tube Diameter (mm)	Diameter (mm)	Weight (kg/km)	Tension load (N)	Crush (N/100mm)
SLO-000-**(n)-M1-A1-FR	4	2.7	9.6	120	1500	3000
SLO-000-**(n)-M1-A1-FR	8	2.7	9.6	120	1500	3000
SLO-000-**(n)-M1-A1-FR	12	2.7	9.6	120	1500	3000
SLO-000-**(n)-M1-A1-FR	24	2.7	9.6	120	1500	3000

approximate values

LAN 7

S/FTP LSZH 4x2xAWG23/1 Cat.7 (up to 600 MHz)



Approved by:



APPLICATIONS

- Indoor/Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems
- Structured cabling for Ethernet networks.

OPERATING TEMPERATURE

-20°C / +70°C (operating)
-20°C / +70°C (storage)
-10°C / +60°C (installation)

MINIMUM BENDING RADIUS

10 times the outer diameter (static)

CABLE CONSTRUCTION

Conductors

Plain annealed copper wire, AWG23/1

Insulation

Foam Polyolefin

Twisting/Individual screen

The insulated cores shall be twisted in pairs and wrapped with Al/Pet tape.

Cabling

The pairs are cabled together

Overall screen

Tinned copper braid.

Outer sheath

LSZH thermoplastic material (SHF1 - SHF2 - SHF2 MUD resistant compound⁽¹⁾)

Nom. Outer diameter

9.00 mm

PAIRS COLOUR CODE

1st pair: ● ●
2nd pair: ● ●
3rd pair: ● ●
4th pair: ● ●

APPLICABLE STANDARDS

Standard reference

IEC 61156-5; EN 50288-5-1;
EN 50289-4-16; ISO/IEC 11801;
NEK 606

Flame retardant

IEC 60332-1-2

Fire retardant

IEC 60332-3-22

Acid gas emission:

BS EN 60754-1, BS EN 60754-2

Smoke density

BS EN 61034-2

ELECTRICAL CHARACTERISTICS

Max DC conductor resistance

73 Ω/km

Max operating voltage

125 Vac

Min insulation resistance

5000 MΩ x km

Capacitance @800 Hz

43 pF/m

Characteristic Impedance

100 Ω

Velocity of propagation

>70%

Loop resistance

146 Ω/km

Type	N° Pairs	Insulation Diameter (mm)	Outer Diameter (mm)	Weight (kg/km)
CAT. 7 S/FTP LAN -SHF1	4	1.35	9.0	90
CAT. 7 S/FTP LAN -SHF2	4	1.35	9.0	90
CAT. 7 S/FTP LAN -SHF2 MUD	4	1.35	9.0	90

approximate values

⁽¹⁾ Tested for: Oil based drilling fluid, Calcio Bromide Brine, IRM 902 and IRM 903 oils

MADE IN ITALY

LAN 7 - Flexible

S/FTP LSZH 4x2xAWG23/7 Cat.7 (up to 600 MHz)



Approved by:



APPLICATIONS

- Indoor/Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems
- Structured cabling for Ethernet networks.

OPERATING TEMPERATURE

-20°C / +70°C (operating)
-20°C / +70°C (storage)
-5°C / +50°C (installation)

MINIMUM BENDING RADIUS

12 times the outer diameter (static)

CABLE CONSTRUCTION

Conductors

Plain annealed copper wire, AWG23/7

Insulation

Foam Polyolefin

Twisting/Individual screen

The insulated cores shall be twisted in pairs and wrapped with Al/Pet tape.

Cabling

The pairs are cabled together

Overall screen

Tinned copper braid.

Outer sheath

LSZH thermoplastic material (SHF1 - SHF2 - SHF2 MUD resistant compound ⁽¹⁾)

Nom. Outer diameter

9.00 mm

PAIRS COLOUR CODE

- 1st pair:** ● ●
2nd pair: ● ●
3rd pair: ● ●
4th pair: ● ●

APPLICABLE STANDARDS

Standard reference

IEC 61156-5; EN 50288-5-1;
EN 50289-4-16; ISO/IEC 11801;
NEK 606;

Flame retardant

IEC 60332-1-2

Fire retardant

IEC 60332-3-24

Acid gas emission:

BS EN 60754-1, BS EN 60754-2

Smoke density

BS EN 61034-2

ELECTRICAL CHARACTERISTICS

Max DC conductor resistance
73 Ω/km

Max operating voltage
125 Vac

Min insulation resistance
5000 MΩ x km

Capacitance @800 Hz
43 pF/m

Characteristic Impedance
100 Ω

Velocity of propagation
>70%

Type	N° Pairs	Insulation Diameter (mm)	Outer Diameter (mm)	Weight (kg/km)
CAT. 7 S/FTP LAN -SHF1	4	1.55	9.0	100
CAT. 7 S/FTP LAN -SHF2	4	1.55	9.0	100
CAT. 7 S/FTP LAN -SHF2 MUD	4	1.55	9.0	100

approximate values

⁽¹⁾ Tested for: Oil based drilling fluid, Calcio Bromide Brine, IRM 902 and IRM 903 oils

MADE IN ITALY

LAN 7 A

S/FTP LSZH 4x2xAWG23/1 Cat.7A (up to 1000 MHz)



Approved by:



APPLICATIONS

- Indoor/Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems
- Structured cabling for Ethernet networks.

OPERATING TEMPERATURE

-20°C / +70°C (operating)
-20°C / +70°C (storage)
-10°C / +60°C (installation)

MINIMUM BENDING RADIUS

10 times the outer diameter (static)

CABLE CONSTRUCTION

Conductors

Plain annealed copper wire, AWG23/1

Insulation

Foam Polyolefin

Twisting/Individual screen

The insulated cores shall be twisted in pairs and wrapped with Al/Pet tape.

Cabling

The pairs are cabled together

Overall screen

Tinned copper braid

Outer sheath

LSZH thermoplastic material (SHF1 - SHF2 - SHF2 MUD resistant compound⁽¹⁾)

Nom. Outer diameter

9.00 mm

PAIRS COLOUR CODE

- 1st pair:** ● ●
2nd pair: ● ●
3rd pair: ● ●
4th pair: ● ●

APPLICABLE STANDARDS

Standard reference

IEC 61156-5; EN 50288-5-1;
EN 50289-4-16; ISO/IEC 11801;
NEK 606;

Flame retardant

IEC 60332-1-2

Fire retardant

IEC 60332-3-22

Acid gas emission:

BS EN 60754-1, BS EN 60754-2

Smoke density

BS EN 61034-2

ELECTRICAL CHARACTERISTICS

Max DC conductor resistance
73 Ω/km

Max operating voltage
125 Vac

Min insulation resistance
5000 MΩ x km

Capacitance @800 Hz
43 pF/m

Characteristic Impedance
100 Ω

Velocity of propagation
>70%

Loop resistance
146 Ω/km

Type	N° Pairs	Insulation Diameter (mm)	Outer Diameter (mm)	Weight (kg/km)
CAT. 7 S/FTP LAN -SHF1	4	1.35	9.0	90
CAT. 7 S/FTP LAN -SHF2	4	1.35	9.0	90
CAT. 7 S/FTP LAN -SHF2 MUD	4	1.35	9.0	90

approximate values

⁽¹⁾ Tested for: Oil based drilling fluid, Calcio Bromide Brine, IRM 902 and IRM 903 oils

MADE IN ITALY

LAN 7 A - Flexible

S/FTP LSZH 4x2xAWG23/7 Cat.7A (up to 1000 MHz)



Approved by:



APPLICATIONS

- Indoor/Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems
- Structured cabling for Ethernet networks.

OPERATING TEMPERATURE

-20°C / +70°C (operating)
-20°C / +70°C (storage)
-5°C / +50°C (installation)

MINIMUM BENDING RADIUS

12 times the outer diameter (static)

CABLE CONSTRUCTION

Conductors

Plain annealed copper wire, AWG23/7

Insulation

Foam Polyolefin

Twisting/Individual screen

The insulated cores shall be twisted in pairs and wrapped with Al/Pet tape.

Cabling

The pairs are cabled together

Overall screen

Tinned copper braid.

Outer sheath

LSZH thermoplastic material (SHF1 - SHF2 - SHF2 MUD resistant compound⁽¹⁾)

Nom. Outer diameter

9.00 mm

PAIRS COLOUR CODE

- 1st pair:** ● ●
2nd pair: ● ●
3rd pair: ● ●
4th pair: ● ●

APPLICABLE STANDARDS

Standard reference

IEC 61156-5; EN 50288-5-1;
EN 50289-4-16; ISO/IEC 11801;
NEK 606;

Flame retardant

IEC 60332-1-2

Fire retardant

IEC 60332-3-24

Acid gas emission:

BS EN 60754-1, BS EN 60754-2

Smoke density

BS EN 61034-2

ELECTRICAL CHARACTERISTICS

Max DC conductor resistance
73 Ω/km

Max operating voltage
125 Vac

Min insulation resistance
5000 MΩ x km

Capacitance @800 Hz
43 pF/m

Characteristic Impedance
100 Ω

Velocity of propagation
>70%

Type	N° Pairs	Insulation Diameter (mm)	Outer Diameter (mm)	Weight (kg/km)
CAT. 7 S/FTP LAN -SHF1	4	1.55	9.0	100
CAT. 7 S/FTP LAN -SHF2	4	1.55	9.0	100
CAT. 7 S/FTP LAN -SHF2 MUD	4	1.55	9.0	100

approximate values

⁽¹⁾ Tested for: Oil based drilling fluid, Calcio Bromide Brine, IRM 902 and IRM 903 oils

LAN 7 - ARMoured

S/FTP LSZH 4x2xAWG23/1 Cat.7 (up to 600 MHz)



Approved by:



APPLICATIONS

- Indoor/Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems
- Structured cabling for Ethernet networks.

OPERATING TEMPERATURE

-20°C / +70°C (operating)
-20°C / +70°C (storage)
-5°C / +50°C (installation)

MINIMUM BENDING RADIUS

20 times the outer diameter (static)

CABLE CONSTRUCTION

Conductors

Plain annealed copper wire, AWG23/1

Insulation

Foam Polyolefin

Twisting/Individual screen

The insulated cores shall be twisted in pairs and wrapped with Al/Pet tape.

Cabling

The pairs are cabled together

Overall screen

Tinned copper braid

Inner sheath

LSZH thermoplastic material

Armour

Galvanized steel wire braid

Outer sheath

LSZH thermoplastic material (SHF1 - SHF2 - SHF2 MUD resistant compound⁽¹⁾)

Nom. Outer diameter

12.6 mm

PAIRS COLOUR CODE

- 1st pair:** ● ●
2nd pair: ● ●
3rd pair: ● ●
4th pair: ● ●

APPLICABLE STANDARDS

Standard reference

IEC 61156-5; EN 50288-5-1;
EN 50289-4-16; ISO/IEC 11801;
NEK 606;

Flame retardant

IEC 60332-1-2

Fire retardant

IEC 60332-3-22

Acid gas emission:

BS EN 60754-1, BS EN 60754-2

Smoke density

BS EN 61034-2

ELECTRICAL CHARACTERISTICS

Max DC conductor resistance

73 Ω/km

Max operating voltage

125 Vac

Min insulation resistance

5000 MΩ x km

Capacitance @800 Hz

43 pF/m

Characteristic Impedance

100 Ω

Velocity of propagation

>70%

Loop resistance

146 Ω/km

Type	N° Pairs	Insulation Diameter (mm)	Outer Diameter (mm)	Outer Diameter (mm)	Weight (kg/km)
CAT. 7 S/FTP LAN -SHF1	4	1.35	9.0	12.6	200
CAT. 7 S/FTP LAN -SHF2	4	1.35	9.0	12.6	200
CAT. 7 S/FTP LAN -SHF2 MUD - GSWB	4	1.35	9.0	12.6	200

approximate values

⁽¹⁾ Tested for: Oil based drilling fluid, Calcio Bromide Brine, IRM 902 and IRM 903 oils

MADE IN ITALY

LAN 7A - ARMoured

S/FTP LSZH 4x2xAWG23/1 Cat.7A (up to 1000 MHz)



Approved by:



APPLICATIONS

- Indoor/Outdoor installation in Off-shore, Oil & Gas and Marine applications
- Data transmission and telecommunication systems
- Structured cabling for Ethernet networks.

OPERATING TEMPERATURE

-20°C / +70°C (operating)
-20°C / +70°C (storage)
-5°C / +50°C (installation)

MINIMUM BENDING RADIUS

20 times the outer diameter (static)

CABLE CONSTRUCTION

Conductors

Plain annealed copper wire, AWG23/1

Insulation

Foam Polyolefin

Twisting/Individual screen

The insulated cores shall be twisted in pairs and wrapped with Al/Pet tape.

Cabling

The pairs are cabled together

Overall screen

Tinned copper braid

Inner sheath

LSZH thermoplastic material

Armour

Galvanized steel wire braid

Outer sheath

LSZH thermoplastic material (SHF1 - SHF2 - SHF2 MUD resistant compound⁽¹⁾)

Nom. Outer diameter

12.6 mm

PAIRS COLOUR CODE

- 1st pair:** ● ●
2nd pair: ● ●
3rd pair: ● ●
4th pair: ● ●

APPLICABLE STANDARDS

Standard reference

IEC 61156-5; EN 50288-5-1;
EN 50289-4-16; ISO/IEC 11801;
NEK 606;

Flame retardant

IEC 60332-1-2

Fire retardant

IEC 60332-3-22

Acid gas emission:

BS EN 60754-1, BS EN 60754-2

Smoke density

BS EN 61034-2

ELECTRICAL CHARACTERISTICS

Max DC conductor resistance

73 Ω/km

Max operating voltage

125 Vac

Min insulation resistance

5000 MΩ x km

Capacitance @800 Hz

43 pF/m

Characteristic Impedance

100 Ω

Velocity of propagation

>70%

Loop resistance

146 Ω/km

Type	N° Pairs	Insulation Diameter (mm)	Outer Diameter (mm)	Outer Diameter (mm)	Weight (kg/km)
CAT. 7 S/FTP LAN -SHF1	4	1.35	9.0	12.6	200
CAT. 7 S/FTP LAN -SHF2	4	1.35	9.0	12.6	200
CAT. 7 S/FTP LAN -SHF2 MUD - GSWB	4	1.35	9.0	12.6	200

approximate values

⁽¹⁾ Tested for: Oil based drilling fluid, Calcio Bromide Brine, IRM 902 and IRM 903 oils

MADE IN ITALY



Conducting Value

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MADE IN ITALY



Cavicel firmly believes in the importance of the quality of its products and it undertakes itself to produce them using clean technologies for the respect and the protection of the environment.

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